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EXAMINER

LIU, BEN H

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,227	Applicant(s) STERNERSON, HANNES	
	Examiner BEN H. LIU	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to an amendment/response filed on March 10, 2008.
2. Claims 1, 7, and 15 have been amended.
3. Claims 3, 8 and 16 have been cancelled.
4. No claims have been added.
5. Claims 1-2, 4-7, 9-15, and 17-23 are currently pending.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 1-5, 7, 9-10, 11-13, 15, 17-19, and 20-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Benyassine et al. (U.S. Patent 6,721,712) in view of Kramer et al. (U.S. Patent 6,658,027).

For independent claim 1, Benyassine et al. disclose a system for providing frame rate conversion for audio data comprising a first client configured to transmit audio data frames at a first frame rate (*see figure 1, which recite a client 120 that transmits speech data frames at a first transmission rate*), a second client configured to receive audio data frames at a second frame rate, wherein the first frame rate is different from the second frame rate (*see figure 1, which recite a client 140 that receives speech data frames at a different rate from the original transmission rate*); and a device configured to facilitate transmission of audio data frames between the first client and the second client (*see figure 1, which recite a conversion module 130 that facilitates the transmission of frames between the transmitter and receiver clients*), and further configured to repackage the audio data frames into one or more frames for transmission to the second client at the second frame rate (*see column 5 lines 62-67, column 6 lines 1-2, and figure 1, which recite a rate decoding module 132 that repackages encoded speech signal 101A into converted speech signal 101B*).

Benyassine et al. disclose all the subject matter of the claimed invention with the exception wherein the device that facilitates transmission of audio data is configured to store the audio data frames received from the first client in an intermediate storage area. Kramer et al. from the same or similar fields of endeavor disclose a method and system wherein a receiver does not receive a transmission at the same rate it was transmitted (*see column 3 lines 53-55*). The system uses a buffer 120 in a VoIP apparatus 100 to temporarily store the frames for

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processing (*see figure 1 and column 3 lines 55-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system and method that stores frames in an intermediate storage area as taught by Kramer et al. with the method and system for providing frame rate conversion for audio data as taught by Benyassine et al. The method and system as taught by Kramer et al. can be combined by coupling the buffer 120 as taught by Kramer et al. to the rate decoding module 132 of the conversion module 130 as taught by as taught by Benyassine et al. in order to store received frames. The motivation for using the intermediate storage area with the method and system for providing frame rate conversion for audio data is to improve the resilience of the system against variable transmission delays.

For independent claim 7, Benyassine et al. disclose a Voice-over-IP device for facilitating communications between a first client and a second client the device comprising control logic configured to receive audio data frames from the first client at a first frame rate (*see figure 1, which recite a conversion module 130 that receives speech data frames at a first transmission rate from client 120*); and control logic to repackage the stored audio data frames into one or more frames for transmission to the second client at a second frame rate (*see column 5 lines 62-67, column 6 lines 1-2, and figure 1, which recite a rate decoding module 132 that repackages encoded speech signal 101A into converted speech signal 101B*); and a control logic configured to transmit the one or more repackaged frames to the second client at the second frame rate wherein the first frame rate is different from the second frame rate (*see figure 1, which recite a conversion module 130 that transmits speech data frames at a rate different from the original transmission rate to client 140*).

Benyassine et al. disclose all the subject matter of the claimed invention with the exception of a control logic used to store the audio data frames from the first client in an intermediate storage area. Kramer et al. from the same or similar fields of endeavor disclose a method and system wherein a receiver does not receive a transmission at the same rate it was transmitted (*see column 3 lines 53-55*). The system uses a buffer 120 in a VoIP apparatus 100 to temporarily store the frames for processing (*see figure 1 and column 3 lines 55-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system and method that stores frames in an intermediate storage area as taught by Kramer et al. with the method and system for providing frame rate conversion for audio data as taught by Benyassine et al. The method and system as taught by Kramer et al. can be combined by coupling the buffer 120 as taught by Kramer et al. to the rate decoding module 132 of the conversion module 130 as taught by as taught by Benyassine et al. in order to store received frames. The motivation for using the intermediate storage area with the method and system for providing frame rate conversion for audio data is to improve the resilience of the system against variable transmission delays.

For independent claim 11, Benyassine et al. disclose a system for providing frame rate conversion for audio data comprising a first client configured to transmit audio data frames at a first frame rate (*see figure 1, which recite a client 120 that transmits speech data frames at a first transmission rate*), a second client configured to receive audio data frames at a second frame rate, wherein the first frame rate is different from the second frame rate(*see figure 1, which recite a client 140 that receives speech data frames at a different rate from the original transmission rate*), and a device configured to repackage the stored audio data frames into one or more frames

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for transmission to the second client at the second frame rate (*see column 5 lines 62-67, column 6 lines 1-2, and figure 1, which recite a rate decoding module 132 that repackages encoded speech signal 101A into converted speech signal 101B*).

Benyassine et al. disclose all the subject matter of the claimed invention with the exception of an intermediate storage area configured to store audio data frames received from the first client. Kramer et al. from the same or similar fields of endeavor disclose a method and system wherein a receiver does not receive a transmission at the same rate it was transmitted (*see column 3 lines 53-55*). The system uses a buffer 120 in a VoIP apparatus 100 to temporarily store the frames for processing (*see figure 1 and column 3 lines 55-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system and method that stores frames in an intermediate storage area as taught by Kramer et al. with the method and system for providing frame rate conversion for audio data as taught by Benyassine et al. The method and system as taught by Kramer et al. can be combined by coupling the buffer 120 as taught by Kramer et al. to the rate decoding module 132 of the conversion module 130 as taught by as taught by Benyassine et al. in order to store received frames. The motivation for using the intermediate storage area with the method and system for providing frame rate conversion for audio data is to improve the resilience of the system against variable transmission delays.

For independent claim 15, Benyassine et al. disclose a method for providing frame rate conversion for audio data, the method comprising receiving audio data frames from a first client at a first frame rate (*see figure 1, which recite a conversion module 130 that receives speech data frames at a first transmission rate from client 120*); converting the received audio data frames

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into one or more frames (*see figure 1 and column 5 lines 50-67, which recite a rate converting module 134 that converts encoded speech signal 101A into converted speech signal 101B*); and transmitting the one or more frames to a second client at a second frame rate; wherein the first frame rate is different from the second frame rate (*see figure 1, which recite a conversion module 130 that transmits speech data frames at a rate different from the original transmission rate to client 140*).

Benyassine et al. disclose all the subject matter of the claimed invention with the exception of storing the received audio data frames in an intermediate storage area. Kramer et al. from the same or similar fields of endeavor disclose a method and system wherein a receiver does not receive a transmission at the same rate it was transmitted (*see column 3 lines 53-55*). The system uses a buffer 120 in a VoIP apparatus 100 to temporarily store the frames for processing (*see figure 1 and column 3 lines 55-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system and method that stores frames in an intermediate storage area as taught by Kramer et al. with the method and system for providing frame rate conversion for audio data as taught by Benyassine et al. The method and system as taught by Kramer et al. can be combined by coupling the buffer 120 as taught by Kramer et al. to the rate decoding module 132 of the conversion module 130 as taught by as taught by Benyassine et al. in order to store received frames. The motivation for using the intermediate storage area with the method and system for providing frame rate conversion for audio data is to improve the resilience of the system against variable transmission delays.

For independent claim 20, Benyassine et al. disclose a method for providing frame rate conversion for audio data, the method comprising receiving audio data frames from a first client at a first frame rate (*see figure 1, which recite a conversion module 130 that receives speech data frames at a first transmission rate from client 120*); repackaging the stored audio data frames into one or more frames (*see column 5 lines 62-67, column 6 lines 1-2, and figure 1, which recite a rate decoding module 132 that repackages encoded speech signal 101A into converted speech signal 101B*); and transmitting the one or more frames to a second client at a second frame rate; wherein the first frame rate is different from the second frame rate (*see figure 1, which recite a conversion module 130 that transmits speech data frames at a rate different from the original transmission rate to client 140*).

Benyassine et al. disclose all the subject matter of the claimed invention with the exception of storing the received audio data frames in an intermediate storage area. Kramer et al. from the same or similar fields of endeavor disclose a method and system wherein a receiver does not receive a transmission at the same rate it was transmitted (*see column 3 lines 53-55*). The system uses a buffer 120 in a VoIP apparatus 100 to temporarily store the frames for processing (*see figure 1 and column 3 lines 55-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system and method that stores frames in an intermediate storage area as taught by Kramer et al. with the method and system for providing frame rate conversion for audio data as taught by Benyassine et al. The method and system as taught by Kramer et al. can be combined by coupling the buffer 120 as taught by Kramer et al. to the rate decoding module 132 of the conversion module 130 as taught by as taught by Benyassine et al. in order to store received frames. The motivation for

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using the intermediate storage area with the method and system for providing frame rate conversion for audio data is to improve the resilience of the system against variable transmission delays.

For claim 2, Benyassine et al. disclose a system for providing frame rate conversion for audio data wherein the device is further configured to receive the audio data frames from the first client at the first frame rate and convert the audio data frames for transmission to the second client at the second frame rate (*see figure 1 and column 5 lines 50-67, which recite a rate converting module 134 that converts encoded speech signal 101A into converted speech signal 101B*).

For claims 4, 9, 12, 17, and 21, Benyassine et al. disclose a system and method for providing frame rate conversion wherein the system is implemented in software, hardware or a combination of both (*see column 3 lines 38-43, which recite implementing the functional blocks of the system as hardware components and/or software components configured to perform the specified functions*).

For claims 5, 10, 13, 19, and 23, Benyassine et al. disclose a system and method for providing frame rate conversion for audio data wherein the first client and the second client include telephonic equipment (*see column 4 lines 15-19, which recite a client vocoder that is a CDMA cellular telephone*) and computers (*see column 1 lines 59-64 and column 5 lines 16-29, which recite a client vocoder computer system configured to operate in G.729 VoIP systems*).

9. **Claims 6, 14, 18, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Benyassine et al. (U.S. Patent 6,721,712) and Kramer et al. (U.S. Patent 6,658,027) as applied to

claims 1, 11, 15, and 20 and further in view of Mizusawa et al. (U.S. Patent Application Publication 2002/0037002).

For claims 6, 14, 18, and 22, Benyassine et al. and Kramer et al. disclose all the subject matter of the claimed invention with the exception that a Voice-over-IP gateway is used for facilitating the communications between a first client configured to transmit audio data at a first frame rate and a second client configured to receive audio data at a second frame rate. Mizusawa et al. from the same or similar fields of endeavor disclose a VoIP gateway device for performing frame conversion of frame formats with different bit rates (*see paragraph 9*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the VoIP gateway for frame conversion as taught by Mizusawa et al. with the system and method for facilitating the communications between a first client configured to transmit audio data at a first frame rate and a second client configured to receive audio data at a second frame rate as taught by Benyassine et al. and Kramer et al. Thus, the VoIP gateway device for performing frame conversion of frame formats as taught by Mizusawa et al. can configured to perform the function of the conversion module 130 through software as taught by Benyassine et al. and Kramer et al. The VoIP gateway can then be deployed as the conversion module. The motivation for using the VOIP gateway device for performing frame conversion of frame formats as taught by Mizusawa et al. with the system and method for facilitating the communications between a first client configured to transmit audio data at a first frame rate and a second client configured to receive audio data at a second frame rate as taught by Benyassine et al. and Kramer et al. is to improve compatibility of the system by providing VoIP access as well as additional functions of private branch exchanges.

Response to Arguments

10. Applicant's arguments with respect to claim 1-2, 4-7, 9-15, and 17-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (*See form PTO-892*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit
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